

Date: Monday, 17/11/2008 10:41:43 AM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 02.750 SUPPORT
Job Number	: 43479	Part Number	: D28931
Estimate Number	: 10829	Drawing Number	: D2893 REV B
P.O. Number	:	Project Number	: N/A
This Issue	: 17/11/2008	Drawing Revision	: B
Prsht Rev.	: NC	Material	:
First Issue	: / /	Due Date	: 24/11/2008
Previous Run	: 42440	Qty:	20
Written By	:	Um:	Each
Checked & Approved By	: <u>JL 08.11.17</u>		
Comment	Est: C 02.11.26 Reformat; Added P/O KJ est D 06.04.19 removed alodine EC Est Rev:E Added priming as per Rev B 07-04-30 JLM est F 08.03.19 Re-format EC verified by: DD Est Rev:G 08-05-15 add QC14 DD verified by:EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	DSK078	D2893-1 TURNING DETAIL
		Comment: Qty.: 0.5000 Each(s)/Unit Total : 10.0000 Each(s) D2893-1 TURNING DETAIL Batch: <u>42596</u> <u>JL</u> <u>MMF</u> <u>08/11/08</u>
2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
		Comment: HAAS 1 Machine as per Folio FA081 Tumble & Deburr <u>JL</u> <u>08/11/01</u> <u>(26)</u>
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		Comment: INSPECT ALL DIM TO DIM SHEET <u>JL</u> <u>08/12/01</u> <u>(26)</u>
4.0	QC8	SECOND CHECK
		Comment: SECOND CHECK <u>JL</u> <u>08/12/03</u> <u>(26)</u>
5.0	POWDER COATING	POWDER COATING <u>M109152</u> <u>QX</u>
		Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3 Mask Inside Bore for Primming <u>9:00</u> <u>M-H</u> <u>08/12/08</u>
	START TIME:	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 17/11/2008 10:41:43 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 02.750 SUPPORT

Job Number: 43479

Part Number: D28931

Job Number:



Seq. #: Machine Or Operation:

01

Description :

OVEN TEMPERATURE: 400
FINISH TIME: 9-30

m/ 08/12/08

6.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08-12-08

(20x)

7.0 SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

Prime inside surface as per Dwg D2893 and QSI 005 4.3.

BT 08-12-08

8.0 QC14

INSPECT SPRAY PAINT



m/ 08-12-18

(20)

Comment: INSPECT SPRAY PAINT

9.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: y tube assy

BT 09-02-25

10.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF
09-02-27

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DART AEROSPACE LTD	Work Order:	43479
Description: Ø2.750 Support	Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

First Article Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		3.000	3.000	3.000	3.000	2.995
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.142	.142	.141	.141	.142
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.158	.152	.151	.154	.150
AH	1.360	1.400		1.375	1.375	1.375	1.371	1.370
AI	0.040	0.060		.049	.047	.046	.048	.052
AJ	1.190	1.230		1.216	1.213	1.213	1.210	1.216
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.530	2.530	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.37
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: JL Date: 08/11/03

Audited by: MK Date: 08/12/03

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	JK

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	43479
Description: Ø2.750 Support	Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

First Article Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				16	17	18	19	20
HAAS Section								
AA	2.985	3.005		2.995	2.995	2.995	2.995	2.995
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.141	.140	.140	.140	.141
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.150	.150	.149	.150	.150
AH	1.360	1.400		1.372	1.368	1.367	1.370	1.370
AI	0.040	0.060		.047	.053	.048	.051	.049
AJ	1.190	1.230		1.210	1.214	1.208	1.213	1.211
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: J.L. Date: 08/11/30

Audited by: mk Date: 08/12/03

Prototype Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	<u>gj</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

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Description: Ø2.750 Support	Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

First Article Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				11	12	13	14	15
HAAS Section								
AA	2.985	3.005		2.996	2.997	2.996	2.996	2.996
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.140	.140	.140	.143	.141
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.141	.141	.141	.140	.140
AG	0.140	0.160		.149	.149	.151	.150	.150
AH	1.360	1.400		1.372	1.371	1.371	1.372	1.369
AI	0.040	0.060		.055	.046	.049	.049	.047
AJ	1.190	1.230		1.218	1.208	1.214	1.214	1.211
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: J.L Date: 08/12/01

Audited by: J.M Date: 08/12/03

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	J.M

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Inspection Dwg: D2893	Rev: B	Page 1 of 1

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First Article Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				16	17	18	19	20
HAAS Section								
AA	2.985	3.005		2.996	2.997	2.997	2.997	2.998
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.143	.140	.140	.139	.140
AD	0.040	0.060		.050	.050	.050	.049	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.151	.149	.150	.150	.150
AH	1.360	1.400		1.370	1.369	1.370	1.372	1.370
AI	0.040	0.060		.053	.046	.049	.050	.054
AJ	1.190	1.230		1.214	1.207	1.210	1.210	1.204
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.530	2.529	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: J.L Date: 08/12/01

Audited by: *mk* Date: 08/12/03

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
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B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM <i>jk</i>	<i>jl</i>

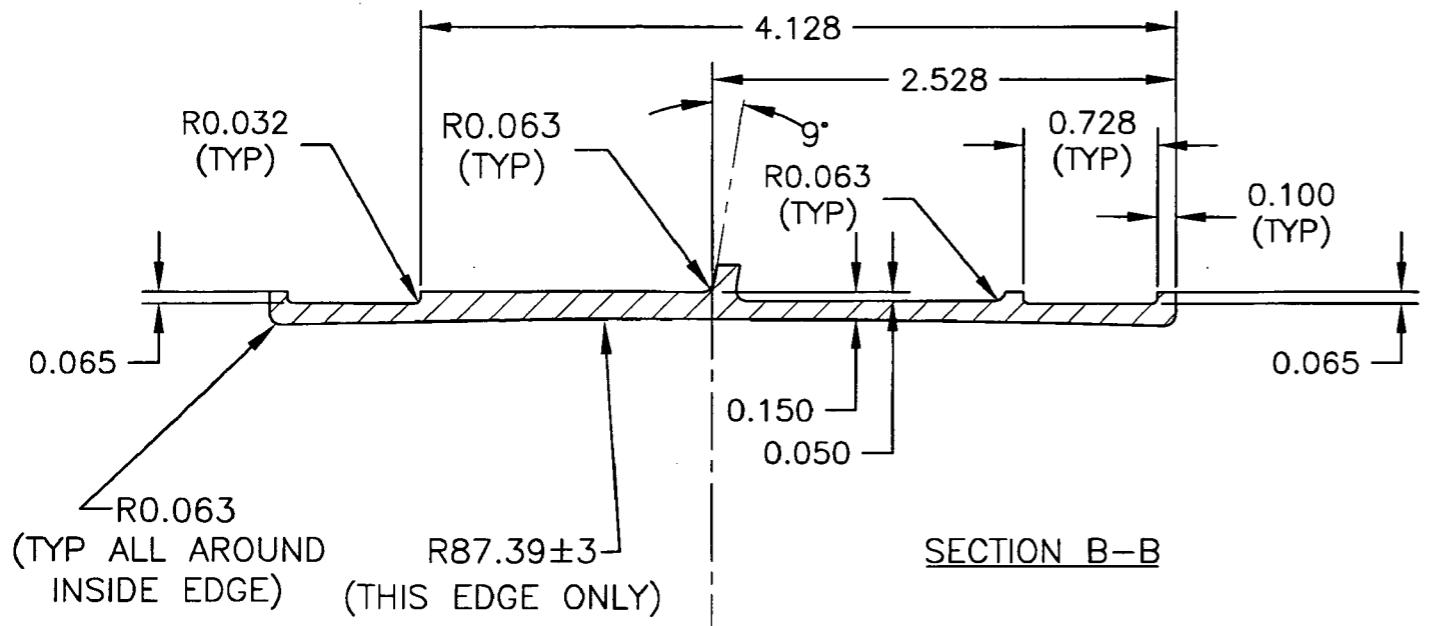
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries



SECTION A-A
TOOLING HOLE DETAIL

D2893-1

1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION PRIME ONLY
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRC) ▲7 ▲B

2) IDENTIFY WITH DART LOGO AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP

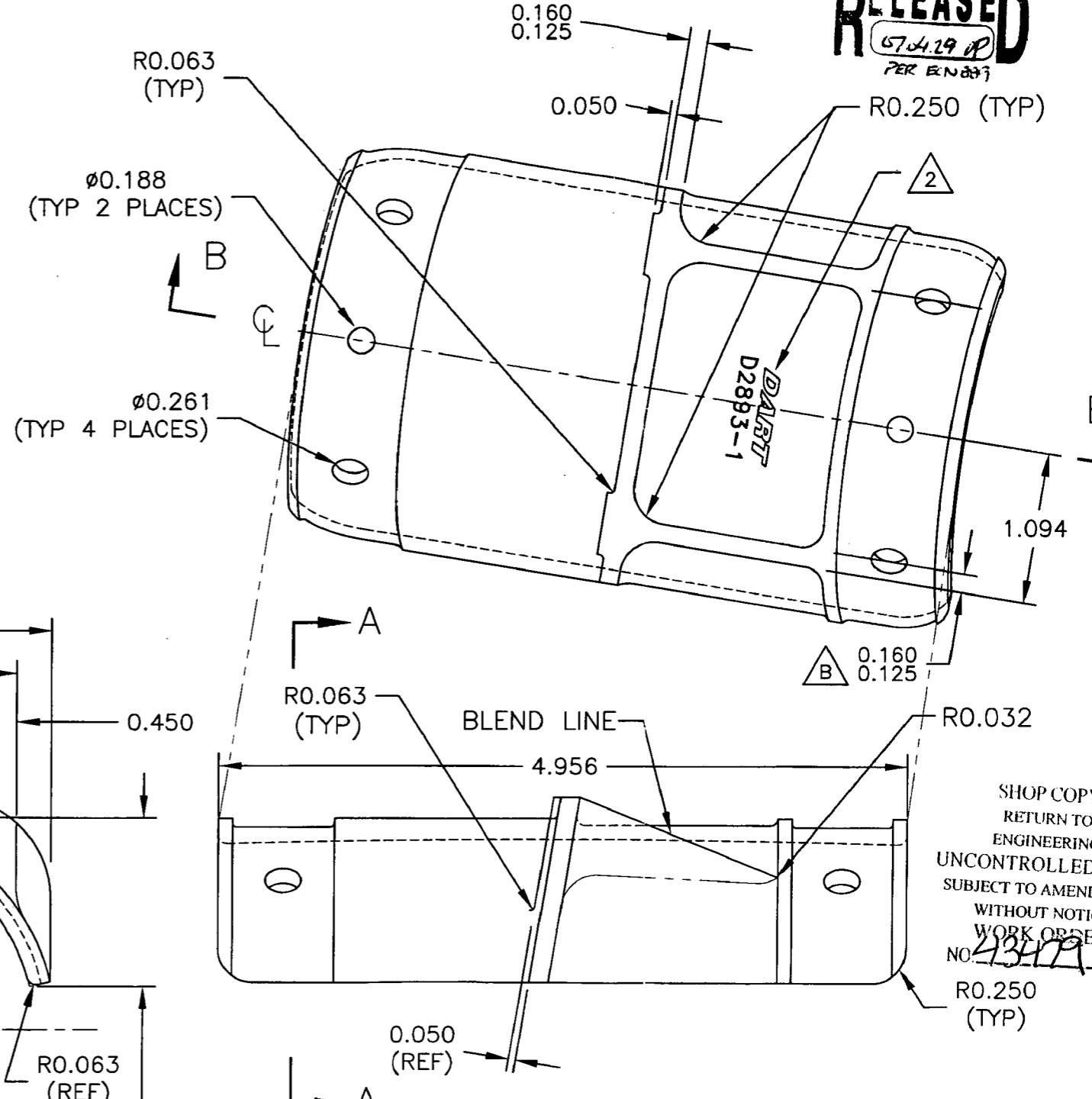
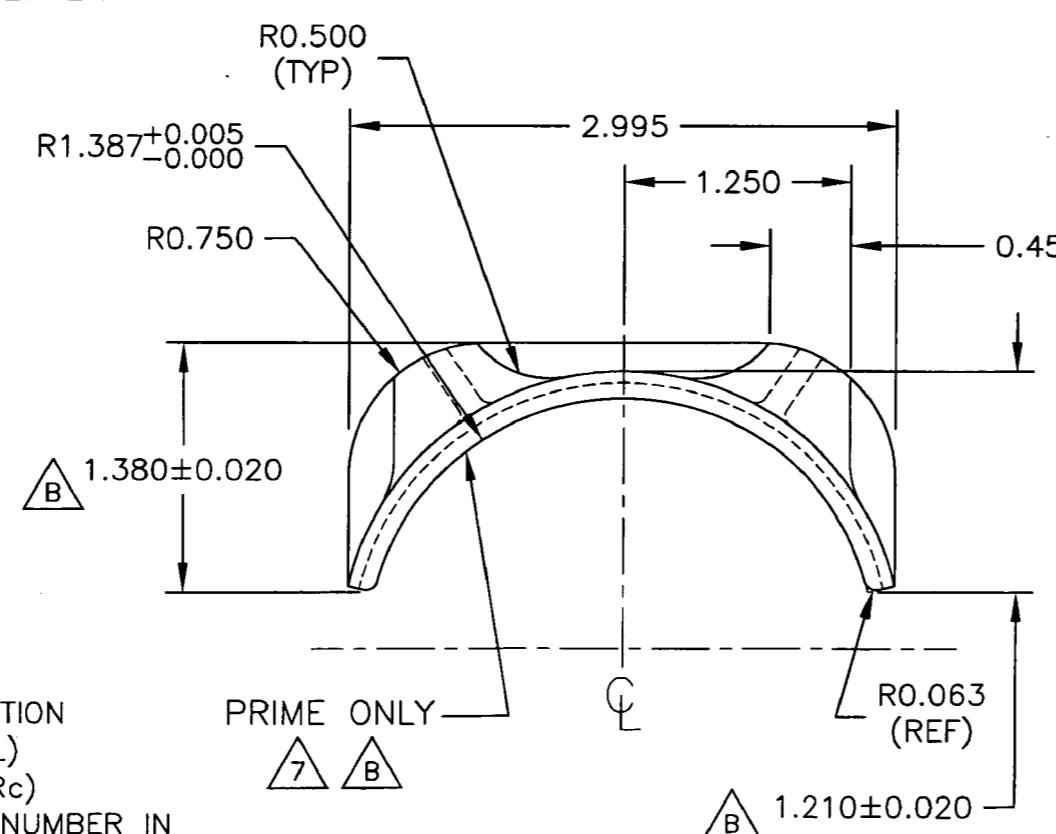
3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020

4) PART IS SYMMETRIC ABOUT CENTERLINE

5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

6) ALL DIMENSIONS ARE IN INCHES

7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2



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THAT IT IS NOT TO BE USED FOR ANY PURPOSE
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PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

B	07.03.16	UPDATE DIMS AS MFG., PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN <i>9P</i>	DRAWN BY <i>PJH</i>	DART DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2893 REV. B SHEET 1 OF 1
DATE 07.03.16	TITLE Ø2.750 SUPPORT 1:1	